

SPRINKLER GENERAL NOTES

1. FIRE SPRINKLES LOCATED IN THE ELEVATOR SHAFT PIT SHALL BE A SIDEWALL SPRINKLER LOCATED NOT MORE THAN 24" ABOVE THE PIT FLOOR.
2. FIRE SPRINKLERS INSTALLED IN THE ELEVATOR MACHINE ROOMS AND TOP OF SHAFTS SHALL BE ORDINARY OR INTERMEDIATE TEMPERATURE RATINGS.
3. ALL SPRINKLERS INSTALLED IN THE ELEVATOR SHAFTS AND MACHINE ROOMS SHALL BE STANDARD RESPONSE. QUICK RESPONSE SPRINKLERS ARE NOT PERMITTED.
4. ANY SPRINKLER REMOVED FOR ANY REASON SHALL NOT BE REINSTALLED. A NEW SPRINKLER SHALL BE INSTALLED.
5. ALL CUTTING, DRILLING AND PATCHING OF WALLS, FLOORS OR STRUCTURAL MEMBERS FOR THE INSTALLATION OF THE SPRINKLER SYSTEMS SHALL BE PROVIDED BY THE SPRINKLER CONTRACTOR. STRUCTURAL COMPONENTS SHALL NOT BE CUT, DRILLED OR MODIFIED IN ANY WAY WITHOUT THE STRUCTURAL ENGINEER'S REVIEW AND APPROVAL.
6. ALL CEILINGS, WALLS, FLOORS AND FINISHES DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED AND PAINTED TO MATCH EXISTING CONDITIONS AND FIRE RATING.
7. SPRINKLER CONTRACTOR SHALL COORDINATE THE DESIGN AND INSTALLATION OF THE SPRINKLER SYSTEM IN THE ELEVATOR MACHINE ROOM AND ELEVATOR SHAFT WITH THE AUTHORITY HAVING JURISDICTION.
8. THE SPRINKLER SYSTEM SHALL REMAIN IN SERVICE AS LONG AS POSSIBLE DURING DEMOLITION ON THE FLOOR. WHEN THE SYSTEM IS TAKEN OUT OF SERVICE, THE OCCUPIED PORTION OF THE FLOOR SHALL REMAIN IN SERVICE. THE UNOCCUPIED PORTIONS SHALL HAVE A FIRE WATCH WHENEVER THE BUILDING IS OCCUPIED. THE FIRE WATCH INSTRUCTIONS CAN BE OBTAINED FROM THE UNIVERSITY FIRE MARSHAL.

MECHANICAL GENERAL NOTES

1. THE MECHANICAL AND PLUMBING CONTRACT DRAWINGS ARE DIAGRAMMATIC AND ARE INTENDED TO INDICATE SCOPE AND THE GENERAL ARRANGEMENT OF THE SYSTEMS. WHERE APPLICABLE THE FOLLOWING NOTES SHALL APPLY TO ALL MECHANICAL (HVAC, PLUMBING, AND PIPING) SYSTEMS.
2. THOUGH SOME DUCTWORK AND PIPING OFFSETS AND TRANSITIONS ARE INDICATED, IT IS NOT THE INTENT OF THE DRAWINGS TO SHOW ALL OFFSETS AND TRANSITIONS REQUIRED. THE CONTRACTOR SHALL FULLY COORDINATE THE MECHANICAL WORK WITHIN ITSELF AND WITH THE WORK OF ALL OTHER TRADES TO PROVIDE COMPLETE AND OPERABLE SYSTEMS WITHOUT INTERFERENCES.
3. PROVIDE APPROVED FIRE STOPPING MATERIAL AROUND ALL DUCTWORK AND PIPING PENETRATIONS THROUGH FIRE RATED FLOORS AND WALLS. REFER TO ARCHITECTURAL DRAWINGS FOR LOCATIONS OF FIRE RATED FLOORS AND WALLS. PROVIDE FIRE DAMPERS AT ALL DUCT PENETRATIONS THROUGH FLOORS AND FIRE RATED WALLS AND FIRE/SMOKE DAMPERS AT ALL PENETRATIONS THROUGH SHAFT ENCLOSURES.
4. SUPPORT ALL EQUIPMENT FROM STRUCTURE WITH SPECIFIED VIBRATION ISOLATION.
5. PROVIDE ACCESS PANELS WHERE REQUIRED FOR ADEQUATE ACCESS TO ALL CONCEALED EQUIPMENT, VALVES, DAMPERS AND CONTROLS.
6. ALL DUCT SIZES REFER TO INTERNAL FREE AREA. REFER TO DRAWINGS AND SPECIFICATIONS FOR INTERNAL INSULATION AND SOUND LINING PRIOR TO FABRICATION.
7. ALL DUCTWORK SHALL BE CONSTRUCTED OF RIGID SHEET METAL UNLESS OTHERWISE NOTED.
8. COORDINATE DIFFUSER, REGISTER AND GRILLE LOCATIONS WITH ARCHITECTURAL REFLECTED CEILING PLAN.
9. INSTALL DUCTWORK AND PIPING MAINS TIGHT TO UNDERSIDE OF STRUCTURE UNLESS OTHERWISE INDICATED.
10. REFER TO MECHANICAL DETAILS FOR TYPICAL EQUIPMENT CONNECTIONS.
11. PATCH AND SEAL ALL REMAINING OPENINGS THROUGH FLOORS, WALLS, AND ROOF RESULTING FROM DEMOLITION OR NEW WORK WITH MATERIALS AND FINISHES TO MATCH EXISTING CONSTRUCTION AND FIRE RATING.
12. AS AN INTEGRAL PART OF THESE DOCUMENTS, THE CONTRACTOR SHALL REFER TO THE SPECIFICATIONS FOR ADDITIONAL INFORMATION.
13. CONTRACTOR SHALL VISIT THE SITE AND VERIFY EXISTING CONDITIONS PRIOR TO THE BEGINNING OF ANY WORK. FAILURE TO VISIT THE SITE SHALL IN NO WAY RELIEVE THE CONTRACTOR FROM ANY RESPONSIBILITY.
14. CONTRACTOR SHALL USE CARE WHEN PERFORMING SELECTIVE DEMOLITION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE TO BUILDING FINISHES, EQUIPMENT, FURNITURE, STRUCTURE, AND MECHANICAL/ELECTRICAL SYSTEMS AND EQUIPMENT. SHOULD ANY DAMAGE OCCUR THE CONTRACTOR SHALL RESTORE DAMAGED AREAS/ITEMS TO ORIGINAL CONDITION TO MEET THE OWNER'S SATISFACTION.
15. CONTRACTOR SHALL NOTIFY AND COORDINATE WITH THE OWNER ANY UTILITY OUTAGES. OWNER SHALL BE GIVEN A MINIMUM OF 72 HOURS NOTICE (THREE WORKING DAYS) FOR ANY OUTAGES.
16. HVAC SHALL BE MAINTAINED TO ALL AREAS OUTSIDE OF THE CURRENT PHASE OF THE RENOVATED AREA AT ALL TIMES. PROVIDE TEMPORARY CONNECTIONS AS REQUIRED TO COORDINATE OUTAGES WITH THE OWNER A MINIMUM OF 72 HOURS (THREE WORKING DAYS) IN ADVANCE.
17. DEMOLITION AND NEW WORK THAT WILL RESULT IN DOWN TIME OF SERVICES (HVAC, PLUMBING, PIPING, ETC.) SHALL BE PERFORMED AT PREMIUM TIME AS REQUIRED TO MINIMIZE DOWN TIME TO ADJACENT SPACES. COORDINATE ALL OUTAGES WITH OWNER.
18. REFER TO ARCHITECTURAL DRAWINGS FOR ADDITIONAL PHASING INFORMATION. ALL WORK AND ASSOCIATED OUTAGES SHALL BE COORDINATED WITH THE PHASING SCHEDULE AND THE OWNER.
19. SCHEDULE ALL WORK IN OCCUPIED SPACES WITH OWNER AND CURRENT TENANT AT LEAST TWO (2) WEEKS PRIOR TO CONSTRUCTION.
20. RETURN TO OWNER, AT THEIR DISCRETION, ALL UNUSED MECHANICAL EQUIPMENT (I.E. AIR DEVICES, THERMOSTATS AND CONTROLS).
21. CONTRACTOR SHALL DRAIN AND FILL EXISTING HYDRONIC SYSTEMS AS REQUIRED. CONTRACTOR SHALL PROVIDE ADEQUATE SHUT-OFF CAPABILITIES AS REQUIRED AND COORDINATE ALL ACTIVITIES WITH THE OWNER AT LEAST 72 HOURS IN ADVANCE.

PLUMBING PUMP SCHEDULE

DESIG.	SERVICE	LOCATION	GPM	HEAD (FT.)	MOTOR			RPM	CONTROL	MANUFACTURER / MODEL	TYPE
					HP	VOLTS	PHASE				
SP-1	ELEVATOR P1 SUMP	ELEVATOR PIT	74	37	1/2	120	1	3600	AUTOMATIC FLOAT SWITCH	STANCOR / SE50A	SUBMERSIBLE
SP-2	ELEVATOR P2 SUMP	ELEVATOR PIT	74	37	1/2	120	1	3600	AUTOMATIC FLOAT SWITCH	STANCOR / SE50A	SUBMERSIBLE
SP-3	ELEVATOR F1 SUMP	ELEVATOR PIT	74	37	1/2	120	1	3600	AUTOMATIC FLOAT SWITCH	STANCOR / SE50A	SUBMERSIBLE

REMARKS:

1. PROVIDE COMPLETE WITH FLOAT SWITCH.
2. PROVIDE WITH 20'-0" POWER CORD.

ELEVATOR MACHINE ROOM AIR CONDITIONER SCHEDULE

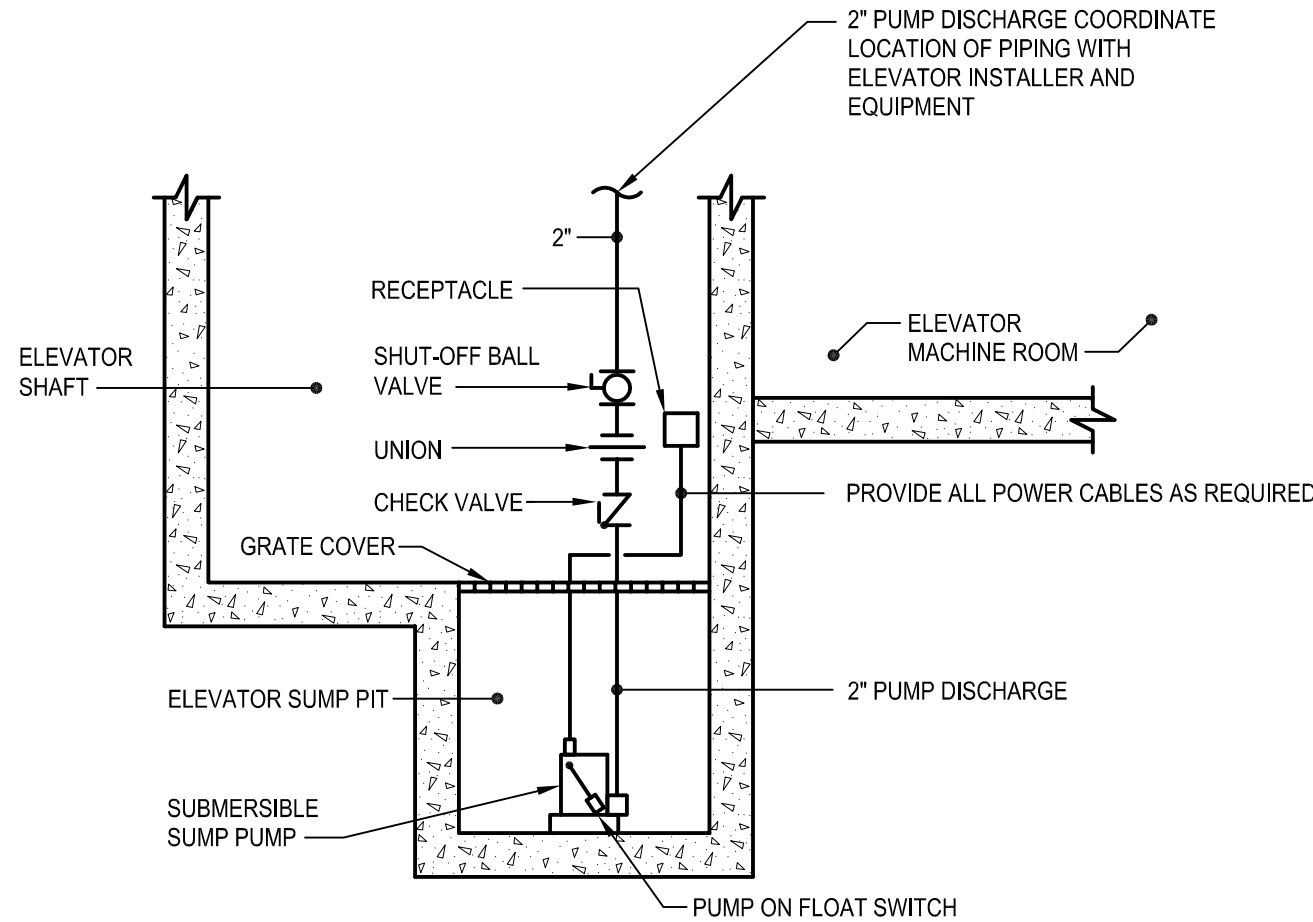
AREA SERVED	DESIGNATION		CFM (1)	MIN SEER	COOLING		ELECTRICAL CHARACTERISTICS						MANUFACTURER / MODEL	REMARKS
	INDOOR UNIT	OUTDOOR UNIT			TOTAL MBH	SENS. MBH	INDOOR			OUTDOOR				
							MIN. AMPACITY	VOLTS/Ø	MOCP	MIN. AMPACITY	VOLTS/Ø	MOCP		
ELEV P1 MACH RM	AC-2	CU-2	706	19.3	30	19.9	1	208/1	15	19.5	208/1	20	DAIKIN / FTXS30LVJU DAIKIN / RKS30LVJU	2,3,4,5,6,7,8,9
ELEV P2 MACH RM	AC-3	CU-3	500	18.6	18	13.7	1	208/1	15	16.5	208/1	20	DAIKIN / FAQ18PJVJU DAIKIN / RZR18PJVJU	2,3,4,5,6,7,8
ELEV F1 MACH RM	AC-4	CU-4	635	17.6	24	18.0	1	208/1	15	16.5	208/1	20	DAIKIN / FAQ24PJVJU DAIKIN / RZR24PJVJU	2,3,4,5,6,7,8

REMARKS:

1. AIRFLOW BASED ON WET COIL, HIGH SPEED FAN.
2. PROVIDE FILTERS.
3. PROVIDE CONDENSATE PUMP.
4. PROVIDE WALL MOUNTED THERMOSTAT.
5. INDOOR UNIT SHALL BE WALL MOUNTED.
6. PROVIDE LOW AMBIENT OPERATION DOWN TO 0 DEGREES F.
7. PROVIDE ANTI-SHORT CYCLE TIMER.
8. SIZE AND ROUTE REFRIGERANT PIPING PER MANUFACTURER'S RECOMMENDATIONS. TOTAL LENGTH OF REFRIGERANT PIPING SHALL NOT EXCEED MANUFACTURER'S RECOMMENDATIONS.
9. OUTDOOR UNIT PROVIDES POWER FOR CORRESPONDING INDOOR UNIT (AC-2/CU-2 ONLY).
10. PROVIDE WITH INTEGRAL DISCONNECT.

MECHANICAL LEGEND

CHECK VALVE		BALANCING DAMPER	
BALL VALVE		FIRE/SMOKE DAMPER	
GATE VALVE		THERMOSTAT	
BACKWATER VALVE		LIMIT OF DEMOLITION	
UNION		CONNECT TO EXISTING	
PIPING CAP		ABBREVIATIONS	
PIPING ELBOW DOWN		ABOVE FINISHED FLOOR	AFF
PIPING ELBOW UP		AIR PRESSURE DROP	APD
PIPE CONNECTION BOTTOM		BACKWATER VALVE	BWV
PIPE CONNECTION TOP		DRY BULB	DB
CLEANOUT		ENTERING AIR TEMPERATURE	EAT
SUPPLY AIR DUCT UP (DASHED LINES FOR DOWN)		EXISTING TO REMAIN	ETR
RETURN & EXHAUST AIR DUCT UP (DASHED LINES FOR DOWN)		EXTERNAL STATIC PRESSURE	ESP
DOUBLE THICKNESS TURNING VANES		HORSEPOWER	HP
EXISTING DUCTWORK		LEAVING AIR TEMPERATURE	LAT
DUCTWORK TO BE REMOVED		NORMALLY CLOSED	NC
OPEN ENDED DUCT		NORMALLY OPENED	NO
NEW DUCTWORK		NOT IN CONTRACT	NIC
DUCT TRANSITION ROUND TO RECTANGULAR		OPEN ENDED DUCT	OED
DUCT TRANSITION		REMOVE EXISTING	RX
DUCT SIZE (FIRST FIGURE IS SIDE SHOWN)		RETURN AIR	RA
		SUPPLY AIR	SA
		TOTAL STATIC PRESSURE	TSP
		WATER PRESSURE DROP	WPD
		WET BULB	WB
		UNLESS OTHERWISE NOTED	UON



1 M001 ELEVATOR SUMP PUMP DETAIL NO SCALE

- NOTES:
1. REFER TO FLOOR PLANS FOR EXACT LOCATION.
2. REFER TO SCHEDULES FOR CAPACITIES.
3. COORDINATE ALL PIPING, VALVES, RECEPTACLES, AND ALL ASSOCIATED APPURTENANCES WITH A ELEVATOR INSTALLER AND EQUIPMENT.
4. PUMP AND ACCESSORIES SHALL BE AS MANUFACTURED BY STANCOR, OR EQUIVALENT AND SHALL COMPLY WITH 2000 ASME A-17.1 SAFETY CODE FOR ELEVATORS AND ESCALATORS.

Revisions	Date	Consultants RICKERT ENGINEERING, INC. STRUCTURAL ENGINEERING 8813 WALTHAM WOODS ROAD, SUITE 301 BALTIMORE, MARYLAND 21234 410.663.5110 — FAX 410.663.5114 ROBERT L. SEYMOUR ASSOCIATES AUTOMATIC TRANSPORT ENGINEERING 182 THOMAS JOHNSON DR. SUITE 200 FREDERICK, MARYLAND 21702 301.662.8112 — FAX 301.662.8117	BURDETTE KOEHLER MURPHY & ASSOCIATES, INC. MECHANICAL / ELECTRICAL / FIRE PROTECTION / TELECOMMUNICATIONS 1410 CLARKVIEW ROAD BALTIMORE, MARYLAND 21210 410.323.0600 — FAX 410.377.2543 BUILDING COST CONSULTANTS, INC. COST ESTIMATING 12317 — 30TH AVENUE PLATTSMOUTH, NEBRASKA 68048 402.298.8260 — FAX 402.298.8290	Seal	DERBY de enterprises ARCHITECTURE PLANNING ENGINEERING 2215 Conowingo Rd, Suite 100 Bel Air, Maryland 21015-1436 410.803.0009 fax 410.836.6611	Drawing Title MECHANICAL LEGEND, ABBREVIATIONS, DETAILS, SCHEDULES, AND NOTES Approved: Chief Engineering Services Approved: Medical Center Director	Project Title REPLACE BUILDING 9 ELEVATORS Building Number 9 Location COATESVILLE, PENNSYLVANIA	Checked MAF Drawn ERS	Date 26, September 2014 Project No. 542-08-110 DRAWING NO. M001 Dwg. - Of xx	DELLC JOB NO. 120701D
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